

ABSTRACT AMENDMENTS

Replace the Abstract with:

Abstract of the Disclosure

In fabricating a semiconductor laser producing light with a wavelength of 770 to 810 nm, impurities are introduced into an MQW active layer near a light emitting facet of the laser to form a disordered region constituting a window layer. Pump light is applied to the window layer to generate photoluminescence whose wavelength λ_{dpl} (nm) is measured. A blue shift amount λ_{bl} (nm) is defined as the difference between the wavelength λ_{apl} (nm) of photoluminescence generated by application of pump light to the active layer on the one hand, and the wavelength λ_{dpl} (nm) of photoluminescence from the window layer under pump light irradiation on the other hand. The blue shift amount λ_{bl} is referenced during the fabrication process in order to predict catastrophic optical damage levels of semiconductor lasers.